

IN THE DRAWINGS

Applicants acknowledge that the drawings have been accepted by the Examiner, as filed on July 7, 2003.

REMARKS

Claims 1-50 remain pending in the present application. Claims 1, 2, 4, 13, 16-18, 20-23, 25, 26, 38-44 and 46-48 are rejected. Claims 3, 5-12 14, 15, 19, 24, 27-37, 45, 49 and 50 are objected to.

Applicants acknowledge and appreciate that the previous rejections were withdrawn and new rejections were provided. In light of the Examiner's new grounds of rejection, Applicants provide the arguments below.

Claim Objections

Applicants acknowledge and appreciate the Examiner indicated that claims 3, 5, 6-12, 14-15, 19, 24, 27-37, 45, 49-50 contain allowable subject matter.

Claim Rejections – 35 U.S.C. 103

The Examiner rejected claims 1-2, 4, 13, 16-18, 20-23, 25-26, 38-39, 40-44, 46-48 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,740,534 (*Adams*) in view of U.S. Patent No. 7,051,250 (*Allen*).

Applicants respectfully assert that neither *Adams* nor *Allen* are available as prior under 35 U.S.C. § 103(a). Claims 1-2, 4, 13, 16-18, 20-23, 25-26, 38-39, 40-44, 46-48 stand rejected under 35 U.S.C. § 103(a) as being obvious over U.S. Patent No. 6,740,534 (*Adams*), in view of U.S. Patent No. 7,051,250 (*Allen*), both as 102(e) prior art references. The instant application is assigned to Advanced Micro Devices, Inc. At the time of the instant invention, *Adams* and *Allen* were both also assigned to Advanced Micro Devices, Inc. Because the instant application and the cited patent were commonly owned at the time of the invention, Applicants are entitled under 35 U.S.C. § 103(c) to disqualify *Adams* and *Allen* as prior art under 35 U.S.C. § 103(a). As the

rejection of claims 1-2, 4, 13, 16-18, 20-23, 25-26, 38-39, 40-44, 46-48 is thus moot. Applicants respectfully request the rejection of these claims be withdrawn.

Further, Applicants assert that the newly cited prior art, *Adams* does not teach, disclose or make obvious elements of the claimed invention that the Examiner claims is made obvious and, further, *Allen* does not make up for the deficit of *Adams*. As acknowledged by the Examiner, *Adams* does not teach a dynamic metrology routing adjustment process based upon tool state analysis. Further, no type of dynamic metrology routing process is disclosed or made obvious by the prior art. Neither cited prior art discloses correlating tool state analysis to a batch of workpieces and adjusting a metrology routing process based upon the correlation.

The deficit of *Adams* is not made up for by *Allen*. *Allen* is directed to changing the routing of a second workpiece from a first processing tool to a second processing tool based upon first processing tool processing a first workpiece and the system detecting a false condition associated with the first processing tool. In other words, *Allen* is directed to detecting fault relating to a processing tool and then changing the dispatching of a subsequent semiconductor wafer from the first processing tool that contains the fault to a second processing tool. Contrary to the Examiner's assertion, *Allen* does not disclose any subject matter to make obvious the dynamic metrology routing adjustment process called for by claim 1 of the present invention. There is no disclosure in *Allen* relating to any type of a correlation of tool state analysis to a batch of workpiece. Further, *Allen* is not directed to metrology routing based upon any type of a correlation. As mentioned above, *Adams* also does not disclose the dynamic metrology routing of claim 1 of the present invention and is discussed herein. *Allen* also does not disclose subject matter. Therefore, *Adams*, *Allen* or their combination do not make obvious or anticipate the dynamic metrology routing adjustment process called for by claim 1 of the present invention.

Accordingly, claim 1 of the present invention is allowable. As indicated above, *Adams* and *Allen* are not available as prior art, therefore, claim 1 of the present invention is allowable.

Independent claim 13 calls for a fault detection analysis and correlating tool help assessment to batches of workpieces to perform an adjustment of metrology routing. As described above, neither *Adams* or *Allen* teaches such subject matter and, therefore, claim 13 of the present invention is allowable. Still further, claim 16 calls for means for performing the dynamic metrology data adjustment process described above and is described herein. This subject matter is also not taught, disclosed or suggested by *Adams*, *Allen* or their combination. Still further, claim 17 and 22 calls for a process controller that is capable of performing the dynamic metrology routing adjustment process described above and as described herein, *Adams*, *Allen* or their combination does not make obvious correlating tool state data to a batch of workpieces and adjusting a metrology routing process based upon this correlation. Therefore, claims 17 and 22 of the present invention are allowable for at least the reasons cited herein. Further, claim 26 calls for a computer readable program storage device encoded with instructions that when executed by a computer performs a dynamic metrology routing adjustment process described above. As described herein, *Pasadyn*, *Allen* or their combination do not make obvious or anticipate the correlation of tool state analysis to a batch of workpieces and adjusting a metrology routing based upon the correlation. Therefore, claim 26 of the present invention is also allowable. 1, 13, 17, 22, 26, 38, 42, 44, 46, are also allowable for at least the reasons cited herein.

Further, method claim 38 calls for performing a dynamic metrology data adjustment process that includes correlating tool state analysis to a batch of workpieces in adjusting metrology data routing based upon the correlation, which includes modifying the position of the

batch in a metrology queue. As described above, this correlation and adjustment of metrology routing is not taught, disclosed or suggested, or made obvious, by *Adams*, *Allen* or their combination. Similarly, independent claim 42 calls for a process controller that is capable of performing the correlation of tool state analysis to the workpieces and adjusting metrology routing process and therefore, for at least the reasons cited above, is not taught, disclosed or made obvious by *Adams*, *Allen* or their combination. Still further, independent claims 44 and 46 calls for adjusting the metrology routing based upon correlation of tool state data and for at least the reasons cited above, are not taught, disclosed or made obvious by *Adams*, *Allen* or their combination.

Accordingly, independent claims 1, 13, 16, 17, 22, 26, 38, 42, 44, and 46 are allowable for at least the reasons cited herein. Further, claims 2-12, 14-15, 18-21, 23-25, and 27-37, 39-41, 43, 45, 47-50 which respectively depend from claims 1, 13, 17, 22, 26, 38, 42, 44, 46, are also allowable for at least the reasons cited herein.

Further, Applicants acknowledge and appreciate that the Examiner has indicated that claims 3, 5, 6-12, 14-15, 19, 24, 27-37, 45, 49-50 are allowable because they contain subject matter but have been objected to because they depend on rejected claims. However, in light of the arguments presented herein, all independent claims of the present invention are allowable and, therefore, claims 1-50 of the present invention are allowable for at least the reasons cited herein.

Reconsideration of the present application is respectfully requested.

In light of the arguments presented above, a Notice of Allowance is respectfully solicited.

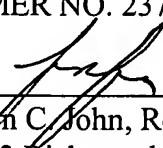
If for any reason the Examiner finds the application other than in condition for allowance, **the Examiner is requested to call the undersigned attorney** at the Houston, Texas telephone

number (713) 934-4069 to discuss the steps necessary for placing the application in condition for allowance.

Respectfully submitted,

WILLIAMS, MORGAN & AMERSON, P.C.
CUSTOMER NO. 23720

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By: 

Jaison C. John, Reg. No. 50,737
10333 Richmond, Suite 1100
Houston, Texas 77042
(713) 934-4069
(713) 934-7011 (facsimile)
ATTORNEY FOR APPLICANT(S)